



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

DOCUMENTS, REPORTS, AND LEGISLATION

Industries and Commerce

From the Bureau of Foreign and Domestic Commerce of the United States Department of Commerce the following publications have been received:

In the Special Agents Series:

- No. 146, *Markets for Agricultural Implements and Machinery in South Africa* (pp. 231), by Juan Homs.
- No. 147, *Electrical Goods in New Zealand* (pp. 47), by R. A. Lindquist.
- No. 148, *South American Markets for Dried Fruits* (pp. 35), by Walter Fischer.
- No. 149, *Cotton Goods in British India. Part IV, Bombay Presidency* (pp. 132), by Ralph M. Odell.
- No. 150, *Commercial Laws of Switzerland* (pp. 52), by Archibald J. Wolfe, supplemented and revised by Robert P. Shick and Phanor James Eder.
- No. 151, *Shoe and Leather Trade in New Zealand* (pp. 31), by C. E. Bosworth.
- No. 152, *Market for Boots and Shoes in Peru* (pp. 89), by Herman G. Brock.
- No. 153, *Chilean Market for Paper, Paper Products, and Printing Machinery* (pp. 72), by Robert S. Barrett.

In the Miscellaneous Series: No. 62, *Argentine Market for Motor Vehicles* ((pp. 27), by David Beecroft.

In the Tariff Series: No. 36, *Customs Tariff of Chile* (pp. 104), by L. Domeratzky.

And Special Consular Reports: No. 78, *East African Markets for Hardware and Agricultural Implements* (pp. 27), by Henry P. Starrett.

The Bureau of the Census has published additional bulletins on manufactures, pertaining to the census of 1914: Brass, Bronze, and Copper Products (pp. 11); The Manufacture of Gas (pp. 25); Cast-Iron Pipe (pp. 7); Iron and Steel (pp. 16); and Miscellaneous Textiles (pp. 27).

The Food Administration at Washington is issuing a series of pamphlets some of which present data of permanent interest.

In connection with the work of the Food Administration is to be

noted *Policies and Plan of Operation* (Washington, Oct. 19, 1917, pp. 42). This contains summaries relating to the marketing of the 1916 wheat harvest, the world's supply for 1917, determination of a fair price, and organization of government wheat buying and the milling trade.

A report drawn up by a committee of the Royal Society at the request of the president of the British board of trade gives a report on *The Food Supply of the United Kingdom* (London, Unwin, 1917, pp. 35). Part I deals with the food supply in the period before the war, 1909-1913; part II with the food supply in 1916; and part III with possible methods of utilizing the available food supply.

The State College of Washington has prepared a typewritten *Bibliography on Food Economy* (Pullman, Nov. 15, 1917, pp. 8).

Among recent publications of the Agricultural Experiment Station of the University of Wisconsin are to be noted: Bulletin 282, *Coöperation in Wisconsin*, by B. H. Hibbard and Asher Hobson (Madison, May, 1917, pp. 44); and Bulletin 285, *Marketing Wisconsin Milk*, by B. H. Hibbard and H. E. Erdman (Dec., 1917, pp. 71). The latter represents a careful analysis, illustrated by diagrams, in which special attention is called to the expensiveness of the present system of milk delivery in cities. The farmer receives about half the price that the final consumer pays. Transportation costs about 7.5 per cent; the expense of delivery is 24 per cent; and of handling at the plant, 18 per cent.

Other pamphlets dealing with the milk question are: *The Cost of Producing Market Milk in 1916-17 on 212 Vermont Farms*, by G. F. E. Story and W. J. Tubbs, published by the Vermont Agricultural Experiment Station (Burlington, Sept., 1917, pp. 24); and *Report on the More Economic Distribution of Milk in the City of Chicago*, by the Committee on Health of the Chicago City Council (Chicago, Municipal Reference Library, 1005 City Hall, Dec., 1917, pp. 15).

The Agricultural Experiment Station of Minnesota reports on two coöperative studies: Bulletin 166, *Coöperative Creameries and Cheese Factories in Minnesota, 1914*, by E. Dana Durand and Frank Robotka (St. Paul, University Farm, Mar., 1917, pp. 53); Bulletin 167, *Co-operative Buying by Farmers' Clubs in Minnesota*, by E. Dana Durand and H. B. Price (June, 1917, pp. 44).

The address of Lewis E. Pierson before the Southern Commercial Congress, October 16, 1917, on *The Financial Aspect of Cotton*, has been reprinted by the Irving National Bank (New York, pp. 26).

Swift and Company has published its *Reply to Questions Submitted July 23, 1917, by the Federal Trade Commission* (Chicago, pp. 35). This contains statistical analysis tending to show the decrease in supply of meat products. Diagrams illustrate cattle costs, beef prices, and cattle receipts.

The California State Council of Defense has issued an exhaustive *Report of the Committee on Petroleum* (Sacramento, 1917, pp. 191). Maps deal with the world petroleum situation and then more particularly with the supplies of California, giving special consideration to its transportation, refining, utilization, and conservation. There are some 40 diagrams illustrating the numerous statistical tables.

The American Sugar Refining Company has printed a pamphlet, prepared by Joseph E. Freeman, secretary of the company, on *Conditions in the Sugar Market, January-October, 1917* (New York, 117 Wall St., pp. 80). It contains helpful charts and maps showing the location of the European beet sugar factories, the movement of sugar from the United States to Europe, and changes in prices.

The United States Shipping Board has issued its *First Annual Report* under date of December 1, 1917 (Washington, pp. 36). It has also printed as a separate *The Shipping Act* (pp. 47), and *Rules of Practice* (pp. 25).

The National Bank of Commerce in New York has prepared a pamphlet on *Trading with the Enemy Act* with the report on the act submitted to the Senate August 15, 1917, by the Senate Committee on Commerce (pp. 70).

The Guaranty Trust Company of New York also has prepared a synopsis of the act followed by the complete text, *Trading with the Enemy* (pp. 67).

The *Hearings* held in September before the House Committee on the Merchant Marine and Fisheries, relating to admission of foreign shipping to the coastwise trade, have been printed (pp. 123).

Corporations

APPRAISAL OF A PUBLIC UTILITY. The reasonableness of water rates fixed by the city of San Francisco for the years 1907-1908 to 1914-1915 inclusive is the subject of a *Report of H. M. Wright, Standing Master in Chancery, and Supplemental Report. In the District Court of the United States, Northern District of California, Second Division. Spring Valley Water Company vs. City and County of San*

Francisco et al. (pp. 274, ix). The valuation of the property entitled to a return was determined for each year, and then the net return realized was calculated both according to the rates fixed by the city and those actually charged by the company. The master's conclusion was that the rates fixed by the city were confiscatory and the actual rates charged by the company were not unreasonable, and that the moneys impounded by the court, representing the difference between the actual rates and those fixed by the city, should be returned to the company. The report covers 283 pages and it is a comprehensive, detailed, and painstaking analysis of the facts. It includes many interesting discussions of principles and procedure, and should have considerable interest to students of public utility regulation.

While careful consideration was shown for both sides of the litigation, there is good reason for dissenting from the master's conclusion in several important matters of principle. Reference should be made especially to the following: (1) In making the physical appraisal the master seems to have relied altogether upon reproduction cost factors accepting absolutely that it is reproduction cost (with deduction for depreciation) on which investors are entitled to a return. (2) He allowed a substantial sum for going value, following the earlier decisions of the Supreme Court of the United States; and presenting a strained explanation of the more recent decisions. The truth seems to be that in the earlier cases, the Supreme Court was fully impressed by the companies' claims for going value in addition to the physical appraisal and overhead costs, while in the more recent cases, it has not felt so certain of the reasonableness of its earlier views. (3) The master allowed in operating expenses each year the fully accrued depreciation, but in addition included also considerable renewals—on the ground that the depreciation method had not been used long enough to provide an adequate fund for the renewals in question. There is obviously a duplication of charges, which should not be placed on the consumer merely because of a change in accounting policy; if the reserve was inadequate, the renewals should have been charged to surplus and not to operating expenses.

JOHN BAUER.

Princeton University.

THE SPECIAL REPORT OF THE INTERSTATE COMMERCE COMMISSION (Dec., 1917, pp. 7), when compared with events of the last ten years presents an interesting cycle in one phase of railway regulation. The annual reports of the commission for 1906 and 1907 and in 1916 and 1917 read very much alike so far as inadequacy of transportation

facilities is concerned (*Annual Report*, 1906, pp. 16-18; 1907, pp. 8-9; 1916, pp. 67-74; 1917, pp. 61-68). A special investigation (evidence in Sen. Doc. No. 233, 59 Cong., 2 Sess., pp. 1-275; Sen. Doc. No. 333, 59 Cong., 2 Sess., pp. 1-503) by the commission in 1906 revealed a very serious situation, but unfortunately no recommendation was made to Congress for legislation at that time (12 I. C. C. 561). In November, 1916, in response to many complaints from all parts of the country the commission made another investigation of inadequate transportation facilities. (Evidence in Car Supply Investigation No. 9284. House Doc. No. 2116, 64 Cong., 2 Sess., pp. 1-54.) Even while this investigation was in progress the commission deemed it necessary to exercise authority over railway service although but four of the seven commissioners believed the commission had such power. Finally in its report to Congress in 1916 the commission was ready to make definite recommendations. It asked for authority to control the movement, distribution, exchange, interchange, and return of equipment used in interstate commerce. This power was finally granted in the Esch-Pomerene law approved May 29, 1917. (Much valuable evidence in House Hearings on H. R. 19546, H. R. 20256, and H. R. 20352, Feb. 1, 9, and 13, 1917, pp. 1-94; House Rep. No. 18, 65 Cong., 1 Sess., pp. 1-16; and Senate Hearings on S. 636, May 3, 1917, pp. 1-54.) Under the provisions of this law the commission organized a division (now bureau) of car service to administer the law. In its annual report for 1917 (p. 67) the commission commented upon the work of this bureau and took a rather hopeful view of the transportation situation. But when Congress met, the commission laid before it a *Special Report* (House Doc. 503, 65 Cong., 2 Sess.) in which a very different view of the transportation situation is presented.

The majority opinion of this report recommended that unification of the carriers be provided in lawful manner by suspending for the period of the war "the operation of the anti-trust laws, except in respect of consolidation or mergers of parallel and competing lines, . . . and of the anti-pooling provision of section 5" of the act to regulate commerce; that in addition carriers "should be provided from the government treasury with financial assistance in the form of loans or advances for capital purposes in such amounts, on such conditions, and under such supervision of expenditure as may be determined by appropriate authority"; that as a "necessary concomitant the regulation of security issues of common carriers in interstate commerce should be vested in some appropriate body." The majority report presented as an alternative that the President might operate the railroads during the period of the war.

To this majority report Commissioner McChord, who had conducted the commission's investigation in November, 1916, dissented. He believed that if the President would exercise the power given to him under the act approved August 29, 1916, to take possession and assume control of the transportation systems, vastly improved transportation conditions could be promptly secured.

In looking back over the ten-year period it is not easy to appreciate why adequate regulation of railway service was not worked out somewhat earlier. Indeed, it appears that so much attention has been given to the charges to be made for railway service that sufficient attention has not been given to the efficiency of that service. (See statement of Commissioner McChord before the National Association of Railway Commissioners, Proc. 1908, p. 15.) Furthermore, in view of conditions even ten years ago (Sen. Docs. No. 233 and 333 cited above) it would appear that our government regulation should have provided a somewhat more constructive program which would have provided more and better transportation facilities.

C. O. RUGGLES.

Ohio State University.

ANNUAL REPORT OF THE INTERSTATE COMMERCE COMMISSION TO CONGRESS. The thirty-first report of the commission (pp. 224), presented as usual to Congress in early December, is the first under the new law which increased the membership from seven to nine and authorized the commission to act through subdivisions. The report in many ways reflects the war conditions of railway operation and also the impending stroke by which the American railway system in late December passed under government control. The commission's report gives considerable space to transportation conditions, and particularly to the problem of car supply, which during 1917 was attacked by Congress, through special legislation on the subject, by the commission itself, through the creation of a car service bureau, and by the railways, through their commission on car service, to which wide powers of action were granted. Problems of rate adjustment and revision continued to be presented to the commission, which during the year 1917 received and filed 167,000 tariff publications proposing some change in rates or ratings. In addition, the commission carried on its usual activities in the way of hearing and adjudicating formal and informal complaints, issuing indictments for violations of the commerce act, and conducting judicial proceedings on matters requiring court action or decision. Safety and accident prevention work proceeded

under the guidance of the bureaus of safety and locomotive inspection. Progress in valuation work is also reported, although hampered by the war.

J. H. PARMELEE.

The Bureau of Railway Economics has prepared a typewritten list of references on the *Relation of British Railways to the European War* (Washington, Dec. 12, 1917, pp. 20).

Two new statements in regard to the federal valuation of railways have been prepared by the Presidents Conference Committee, 737 Commercial Trust Bldg., Philadelphia, under date of November 1 and December 31, 1917.

The hearings before the Senate Committee on Interstate Commerce in regard to *Price Regulation of Steel*, held Sept. 21, 1917, have been printed as a separate (Washington, pp. 70).

A *Memorandum on Depreciation* was filed before the Interstate Commerce Commission in connection with the valuation of the property of the Texas Midland Railroad, prepared by Counsel William A. Glasgow, Jr., and Louis L. G. Benedict. This discusses the theoretical aspects of depreciation (pp. 50).

Labor

The following bulletins have been issued by the Bureau of Labor Statistics of the federal department:

No. 214, *Union Scale of Wages and Hours of Labor, May 15, 1916* (Washington, Sept., 1917, pp. 291). This is the fifth bulletin on this subject, the successive bulletins including data since the year 1907. It is noted that organized labor reached wages higher in 1916 than in any preceding year. This increase, however, was not as great as the advance in retail prices of food in 1916, the latter being 12 per cent as compared with 4 per cent in wages. The data are based upon reports from 48 cities in 32 states.

No. 216, *Accidents and Accident Prevention in Machine Building* (Aug., 1917, pp. 117). A statistical innovation is made in this investigation showing the seriousness of accidents by what is called "severity rates." "Assume that a plant employing 1,000 300-day workers during the course of a year had 2,000 accidents, and that the total time lost by the men injured was 5,000 working days; the accident frequency rate for the year would be 200 per 1,000 workers;

the severity rate would be 5,000 days lost per 1,000 workers, or more conveniently expressed, an average of 5 days per individual worker." A fatal injury is reckoned as equivalent to the loss of 30 years working time, 9,000 days. Other injuries are credited with lower time losses. The number of accidents occurring during the year 1912 was 13,647 resulting in 37 deaths, 411 permanent injuries, and 13,199 temporary disabilities. This is equivalent to an accident frequency rate of 118 per 1,000 full-time workers or a severity rate of 5.6 days loss per worker. It is shown that the plants not having a good safety organization have accident frequency rates three or four times as high as those having a well developed system. This study contains valuable material for those interested in the subject of accident insurance. A table on page 21 summarizes comparative time allowances for specified disabilities under the laws of the various states. The report as a whole is based upon accident data for the year 1912 obtained from 194 machine-building plants employing a total of nearly 116,000 workers. There are useful charts and photographs.

No. 218, *Wages and Hours of Labor in the Iron and Steel Industry: 1907 to 1915. With a Glossary of Occupations* (Oct., 1917, pp. 526). This continues studies previously appearing in Bulletins 154 and 168. Evidence is given in regard to the reduction from 7-day work to 6 days per week. Special attention should be directed to the glossary which will be helpful in understanding the various processes of this industry.

No. 221, *Decisions of Courts Affecting Labor: 1916* (Sept., 1917, pp. 358). Fifty pages are given to an analysis and review of the decisions, followed by generous abstracts. Among the more important decisions are those of the Supreme Court on the Adamson eight-hour law for trainmen, the constitutionality of the workmen's compensation laws, and the Oregon ten-hour day for factory employees.

A valuable document, though brief, is the *Fifth Annual Report of the Chief, Children's Bureau* of the federal Department of Labor for the year ended June 30, 1917 (Washington, 1917, pp. 50). This contains comment on the recent federal child labor act. A summarized statement is given of the field studies in 8 cities in regard to infant mortality with particular reference to the income of fathers. It appears that one fourth of all the fathers in the cities covered earned less than \$550 a year. The death rate for their babies was 162.5 or 1 in every 6. About one eighth of all the fathers earned \$1250 or more; and the death rate for their babies was 62.5 or 1 in 16. A summary is given of the recent legislation on soldiers' compensation

and insurance with particular reference to the benefits for children. And there is a summary of the recent work in Canada, Australia, and New Zealand for protecting the standards of labor for children.

The *Fourth Annual Report of the State Board of Labor and Industries* of Massachusetts (Boston, 1917, pp. 197) contains reports on the hotel and restaurant investigation (pp. 27-40), on occupational diseases (pp. 65-104), and on the cutlery industry, the hat industry, and minors in the tobacco industry.

The work of women in connection with war demands receives attention in three pamphlets:

The National Industrial Conference Board (15 Beacon St., Boston) has prepared an *Analysis of British Wartime Reports on Hours of Work as Related to Output and Fatigue* (No. 2, Nov., 1917, pp. 57). This is an exceptionally conscientious and detailed piece of work analyzing the reports made by the Health of Munition Workers Committee of England; and the material has been presented in a form which makes it immediately available.

The Textile Department of the Merchants National Bank (28 State St., Boston) has issued a pamphlet prepared by W. Irving Bullard, manager of the Textile Department of the bank, on *Women's Work in War Time* (pp. 85). This gives special attention to the replacement of men by women in different industries, showing the particular departments which they enter.

And the Merchants' Association of New York has presented a report, prepared by Alfred L. Smith, manager of its Industrial Bureau, on *Increased Employment of Women in Industry* with particular reference to American conditions. Among the topics discussed are the extent to which women are being substituted for men, probability of increased substitution, type of work satisfactorily performed by women, wages usually paid to women, the difficulty of determining relative efficiency of male and female workers, and the problems arising from the substitution of female labor.

Another recent publication of the Merchants' Association is *Readjustment and Operation of Industry in England since 1914* (Nov., 1917, pp. 28), which is a report of five conferences between employers and representatives of the British Ministry of Munitions.

The *Report of the Department of Labor* of New Jersey for 1916 (Trenton, pp. 109) devotes some 40 pages to sanitary standards for the chemical trades.

Further reports dealing with labor are:

Bulletin No. 528 of the United States Department of Agriculture, *Seasonal Distribution of Farm Labor in Chester County, Pa.*, by George A. Billings (Washington, April, 1917, pp. 29).

Labor Laws of the State of California, 1917 (Bureau of Labor Statistics, San Francisco, 1917, pp. 268).

Findings and Award in The United Mine Workers of America, District No. 15, Employes of the Colorado Fuel and Iron Company vs. The Colorado Fuel Company (Denver, Industrial Commission of Colorado, 1917, pp. 25).

Copy of Child Labor Law, State of Illinois (Chicago, Illinois Department of Labor, Division of Factory Inspection, 608 S. Dearborn St., 1917, pp. 18).

Eighteenth Annual Report of the Bureau of Labor Statistics of the Illinois Free Employment Offices and the Supervision of Private Employment Agencies for the Year Ending September 30, 1916 (Springfield, 1917, pp. 73).

Thirty-fourth Annual Report of the Department of Labor of the State of Michigan (Lansing, 1917, pp. 627).

Annual Report of the Industrial Commission, State of New York (Albany, April, 1917, pp. 236).

Twenty-third Annual Report of Factory Inspection made to the General Assembly at its January Session, 1917 (Providence, R. I., 1917, pp. 98).

Twentieth Annual Report of the Bureau of Labor and Industrial Statistics of the State of Virginia, 1917 (Richmond, 1917, pp. 154).

Money, Prices, Credit, and Banking

WHOLESALE PRICES IN CANADA. *The Seventh Annual Report on Wholesale Prices in Canada* (Ottawa, 1917, pp. 295) brings the Canadian price data, index numbers, and discussion down to December, 1916. The report is divided into six parts.

I. Review of Wholesale Prices in Canada, 1916 (pp. 1-109). This is a verbal discussion illustrated by tables and charts. Section I (pp. 1-25) contains a general summary, particularly for the years 1914, 1915, and 1916, of the facts and causes of the recent rise in wholesale and retail prices, of the conditions of Canadian industry, commerce, and finance, and a comparison of the recent movement of Canadian prices with price movements in other countries. Section II (pp. 26-33) contains a comparison of the regular Canadian Department of

Labor index number for wholesale prices annually 1890-1916 (an unweighted simple arithmetic average, base 1890-1899) with a weighted number for the same years (group weights). This section also contains a summary discussion of price movements by groups and by individual commodities. Section III (pp. 34-109) contains a detailed discussion of the facts and causes of the price movements of each group and each commodity in the wholesale index number.

II. Tables of Wholesale Prices, 1916 (pp. 111-196). The *actual* wholesale prices for each commodity for each month of 1916.

III. Tables of Index Numbers, 1890-1916 (pp. 197-220). The *relative* wholesale prices for each commodity for each year 1890 to 1916 upon the basis of 1890-1899 = 100.

IV. Retail Prices, Canada, 1900, 1905, and 1910-1916 (pp. 221-243). The *actual* retail prices of "thirty staple foods and of coal, wood and coal oil in some sixty commercial and industrial cities of Canada." Quotations are given for each year, each commodity, and each city, separately, with averages for each province.

V. Prices in Other Countries (pp. 245-288). A discussion, with tables and index numbers for varying numbers of years, of prices in the United Kingdom, the United States, France, Italy, Switzerland, Holland, Denmark, Norway, Sweden, Finland, Austria, Germany, Australia, New Zealand, and Japan.

VI. Gold Production, the Monetary Supply and Prices (pp. 289-295). Tables of gold production and the condition of the world's great banks. Discussion of the relation of these factors to price movements.

In general the report is admirable. Some of the most interesting points are only indirectly connected with commodity prices, for example, the fall in rents (pp. 13 and 18) and the great decline in building permits since the peak in 1912 (pp. 4 and 5), the violent reversal of the trade balance (pp. 6-7), and the shifting of Canadian bond issues from London to New York (pp. 7-8). The detailed discussion not only of prices but of "information directly bearing on . . . prices" might with great advantage be copied by the United States Bureau of Labor Statistics. The family budget retail index numbers for each province separately (pp. 16-17) and the discussion of each separate commodity in the wholesale number (pp. 34-109) are admirable features. An extension of the family budget index number to each reporting *city* separately would be a further gain.

The Canadian Department of Labor still clings to the unweighted-simple-arithmetic-average-of-relatives type of index number with base

1890 to 1899. It defends this procedure theoretically by claiming that the choice of commodities has already introduced an intelligent weighting (p. 26), and statistically by attempting to show that the unweighted number has practically the same movement as a weighted one (p. 29). However, this is not even "practically" true. Though the 1916 figures (percentages of 1890-1899 prices) are unweighted 182.0, weighted 182.3, the 1912 figures are unweighted 134.4, weighted 143.9. From 1912 to 1913 the weighted and unweighted numbers move in opposite directions. Moreover, the weighted number is only partially weighted. It is a "group weighting." Haphazard weighting still remains within the groups.

Again, the type of difficulty recognized in the Introductory Note, where we read, "During 1915 one line of spelter added in 1910 was dropped, as owing to the great advance in prices of spelter, two series in addition to zinc sheets gave these lines an undue importance in the calculation of the index number," would not be removed by *any* weighting of an arithmetic average type of index number. The "aggregate of actuals" which has become so popular with the United States Bureau of Labor Statistics is involved in exactly the same difficulty.¹ After a commodity has doubled in price a one per cent movement in the price will affect an aggregate of actuals just twice as much as it would before the commodity doubled in price. Moreover, we have every reason, both theoretical and statistical, for believing that its *percentage* fluctuations will tend to be just as great after it doubles in price as before.

Another difficulty with an unweighted arithmetic average is the effect of the choice of base upon the movements of the number. A low price base period, like that used by the Canadian Department (1890-1899 = 100) exaggerates the extent of the percentage rise in the index number. If the last year (1916), which is a year of high prices, were used as base, the percentage increase from the nineties to 1916 would appear considerably less than it does in the present number. The reason for this is important and interesting. Moreover, it seems unknown to the makers of index numbers.

If there be two years and we compare prices by taking an *harmonic* average of relatives using the *first* year as base, the ratio of the index number of prices in the second year to the index number of prices in the first year will be the same as if we took an *arithmetic* average of relative using the *second* year as base. (The proof of this will be found

¹ An aggregate of actuals may, of course, always be considered as an arithmetic average of relatives with a particular set of weights.

in the accompanying note.²) A curious sidelight on this fact is the recent tendency of some government bureaus to change their base periods, arguing that the last completed year is the best possible base. To compare prices in 1916 with prices in 1900 by means of arithmetic averages, using 1916 as base, is identically the same thing as to compare the prices by means of harmonic averages using 1900 as base. Now an harmonic average is always and necessarily less than the corresponding arithmetic average. Therefore, in comparing a low price period with a high price period, if the low price period be taken as base, the *arithmetic* averages will show a greater percentage difference between the high and low price periods than the harmonic averages. Vice versa, if the high price period be taken as base, the *harmonic* averages will show a greater percentage difference between the high and low price periods than the arithmetic. Moreover, the percentage difference shown by the arithmetic averages with the low price period as base equals the percentage difference shown by the harmonic averages with the high price period as base. (See Note 2.) Therefore the percentage difference shown by the arithmetic averages with the low price period as base is greater than the percentage difference shown by the arithmetic averages with the high price period as base. This is the key to the problem of the effect of choice of base period upon an arithmetic average index number.

University of California.

FREDERICK R. MACAULAY.

² Actual Prices

I	II
a_1	b_1
a_2	b_2
a_3	b_3
...	...
a_n	b_n

Taking the *first* year as base and using an *harmonic* average, prices in the second year are to prices in the first year as

$$\frac{100}{\frac{a_1}{b_1} + \frac{a_2}{b_2} + \frac{a_3}{b_3} + \dots + \frac{a_n}{b_n}} \text{ is to } 100$$

Multiply each of these index numbers by

$$\frac{a_1}{b_1} + \frac{a_2}{b_2} + \frac{a_3}{b_3} + \dots + \frac{a_n}{b_n}$$

and (as the ratio of the one to the other remains the same) we have prices in the second year to prices in the first as

$$100 \text{ is to } \frac{100 \left(\frac{a_1}{b_1} + \frac{a_2}{b_2} + \frac{a_3}{b_3} + \dots + \frac{a_n}{b_n} \right)}{n}$$

But this is the ratio of prices in the second year to prices in the first year when we take an *arithmetic* average of relatives and use the *second* year as base.

The Federal Reserve Board has made a reprint of *The Federal Reserve Act* with amendments through June 21, 1917 (Washington, pp. 62).

The Comptroller of the Currency has also prepared a new edition of *The National-Bank Act as Amended, the Federal Reserve Act, and Other Laws Relating to National Banks* under date of August, 1917 (pp. 186).

The operations of the *Postal Savings Systems* for the year ended June 30, 1917, are summarized in a letter of the Postmaster General and published as House Document No. 489, 65th Congress, 2d Session (pp. 61).

The *Banking Law* of Iowa revised to July 14, 1917, appears in pamphlet form (Des Moines, pp. 52).

The *Proceedings of the Thirtieth Annual Convention of the Kansas Bankers' Association*, held May, 1917, contains addresses on recent legislation in Iowa by Senator C. E. Snyder (p. 46) and Deputy Bank Commissioner L. A. Johnson (p. 50) and an address on bank taxation by S. T. Howe (pp. 113).

A bulletin of the National Federation of Remedial Loan Associations (Secretary George E. Upson, 107 Paul Bldg., Utica, N. Y.) publishes the *Proceedings of the Ninth Annual Convention*, held in Cincinnati, May 10, 1917 (pp. 36). The *Work of the Remedial Loan Societies, 1916-1917* is summarized in a folder published by this association.

Edward B. Smith & Co., bankers of New York (30 Pine St.), have printed a folder comparing the gross and net income to be derived from investment in liberty loans and railroad and public utility bonds.

Two other reports to be noted are: *Annual Report of the Superintendent of Banks of New York for 1916* (Albany, 1917, pp. 584); and *Twenty-fifth Annual Report of the State Banking Board on Nebraska Building and Loan Associations* (Lincoln, 1917, pp. 159).

Public Finance

ONTARIO BUSINESS TAX. The Ontario business tax adopted in 1906 is a surtax on the real estate value of premises used for business purposes. Although a percentage of the assessed value of the real estate occupied by each establishment constitutes its business assessment, this percentage is not uniform for all kinds of business. The business

assessment of a restaurant, for instance, is only 25 per cent of the real estate value; that of a bank, 75 per cent. All business assessments fall between these two limits. Wholesalers and financial institutions are assessed at 75 per cent of the real estate value; manufacturers at 60 per cent; department stores, professional men, and lumber yards at 50 per cent; newspapers and flour mills at 35 per cent; retail merchants at 30 per cent; and theaters, livery stables, garages, and hotels at 25 per cent. This list is only illustrative. Practically every business is assessed.

The business assessment is subject to the same tax rate as the real estate assessment. Payment of the business tax is a personal liability on the part of the occupier and not a charge against real estate.

In the average city of Ontario the business tax yields from 8 to 12 per cent of the total taxes for municipal purposes.

The business tax was adopted by the municipalities of Ontario as a substitute for the personal property tax. The change was favored on the ground that it would equalize taxation between different merchants and that it would give cities a more definite and staple source of revenue. Unlike the personal property tax, the business tax would avoid annoying inquisitions into a man's private affairs; attempts at evasion and fraud would be entirely done away with. For the business tax, it was claimed, assessments were so simple as to be merely a matter of arithmetic, the business assessment in each case being automatically fixed by the real estate assessment. Any trade with a definite place of business was, moreover, as easily taxed as another. No books, no stocks need be examined by the assessor. One assessment would suffice for the taxation of both business and real estate. This would reduce the administrative cost to a minimum.

Ontario was not blind to the fact that the business tax also had some shortcomings. For one thing it was not based upon the ability of the taxpayer to pay taxes. Two business men, occupying adjoining premises exactly alike in character and carrying on the same kind of business, might enjoy very different incomes. Moreover, under certain conditions the merchant or manufacturer occupying a premise of small value is more able to pay than is one occupying a premise of great value. The answer to this objection was that though one might not be so successful as his competitor, both enjoyed precisely the same benefits from local government and ought therefore to pay the same tax. Should the tax bear more heavily upon one than upon the other, the person so mulcted would only be paying the penalty of inferior ability and industry.

To distribute the tax more or less equally between different classes of business the scheme of having different rates of assessment was hit upon for different businesses. If all had been assessed at the same rate the tax would have borne onerously upon retail merchants who in the very nature of the case are obliged to occupy the more central and valuable sites in a city. This classification of different businesses in a rough way not only equalized the taxes paid by those occupying premises of a widely different character and of varying values but also those similarly situated and employing sites of the same value for different purposes.

The incidence of the Ontario business tax is so indefinite that it is difficult to generalize about it. In some instances it is undoubtedly paid by the business itself; in other instances the consumer may probably pay it in the way of higher prices. If the tax is sufficiently large to prove burdensome it may induce business either to occupy less space or to seek less valuable premises. Under either of these conditions the competition among owners for tenants may result in rents so much lower as to offset the tax. In other words, the incidence of the tax would be shifted right back to real estate.

In Toronto it has already been charged that the assessors strive to make fair business assessments by modifying the real estate assessment. To avoid the injustice of overtaxing the merchant they under-assess the property used for business purposes. Should this policy progress to any considerable extent, the valuations of real estate used for non-business purposes must naturally be correspondingly increased. In that event the upshot of the business tax would be an additional burden imposed upon residential property. Shifted thus, the business tax, instead of being a tax on business, would be a discriminatory tax on real estate. The probability is that this will be the natural result. As the business assessments increase automatically with increases in the assessment of real estate, the assessors will find it expedient to be rather slow in increasing the assessment of business property. The opposition to such increases will be twofold; both owner and tenant will protest. The assessment of residential property may be raised with exciting the protest of only one person, that is, with half the facility. The temptation to the assessor appears too great to be withstood.

HERBERT S. SWAN.

The First Annual Report of the United States Tariff Commission (Washington, 1917, pp. 26) renews the recommendation for the enactment of a law for safeguarding revenue between the time of the first

stage of legislative consideration and the final enactment. The commission is at work upon a new codification of the customs administrative laws. Investigations are being prosecuted in regard to establishment of free ports or free zones. Reference is also made to a survey being carried on in the chemical industry.

Bulletin 574 of the New York Tax Reform Association (29 Broadway, New York) contains a summary of federal tax legislation, 1917 (pp. 4).

Two pamphlets relating to the liberty loan are: *The Liberty Loans*, issued by the Guaranty Trust Company of New York (pp. 12); and *Accounting for the Liberty Loans, 1917*, by Harvey S. Chase, reprinted from the *Journal of Accountancy*, January, 1918 (pp. 11).

Pamphlets relating to war revenues are as follows:

The Cost of the War (Mechanics and Metals National Bank of New York, Oct., 1917, pp. 53), which gives a summary of war loans of different nations, national debts, and wealth of different nations.

War Revenue and Federal Income Tax Laws (National Bank of Commerce, New York, Oct., 1917, pp. 170). This contains the text of the War Revenue act of October 3, 1917, and the federal Income Tax law of September 8, 1916, with subsequent amendments.

The War Tax Law of October 3, 1917 (American Exchange National Bank of New York City, pp. 78).

The War Tax of 1917 (National City Company of New York, pp. 62), giving detailed explanations with rulings and illustrations.

War Excess Profits Taxes (American Exchange National Bank of New York, pp. 16). This gives the constructive sections and was prepared in response to a request from the Treasury Department, by Benjamin G. Paskus.

The following documents refer to state and local taxation:

Finances of Ohio Cities: Debt and Taxation, a bulletin of the Ohio Legislative Reference Department (Columbus, 1917, pp. 81).

Laws Relating to Assessment and Taxation in Kansas (Topeka, Tax Commission, 1917, pp. 141).

Annual Report of the Tax Commission of Ohio for 1916 (Columbus, 1917, pp. 149).

Report of the State Tax Commission of New York, 1916 (Albany, 1917, pp. 474, 725).

Insurance

THE WAR RISK LIFE INSURANCE ACT OF THE UNITED STATES.¹ The effect of the war on the cost of life insurance has been marked; and yet the need of insurance protection was never more clearly recognized. The soldier or sailor entering the service found that insurance companies either were increasing rates to prohibitive points or were refusing to grant insurance on any terms. Nor are the companies to be criticised for such procedure. In practically all countries their treatment of old policyholders in particular has been liberal. Indeed, if one were to venture a prophecy, it would be that the final results, which will be known only when war statistics are available, will show that the officials of insurance companies were in some respects too liberal. There is no good reason why the insurance companies, which are private organizations established and operated for the benefit of members, should assume the burden of granting protection to the millions of dependents of those entering the war. This military service was undertaken for the benefit of the nation as a whole and not peculiarly for the benefit of the policyholders in life insurance companies. Practical consideration offered three methods of meeting the situation, so far as life insurance was concerned:

First, the companies might refuse to insure the lives of those entering the army or navy, either by absolute refusal or by placing the premium at a prohibitive point. Then in case of death, the government would grant a pension to the dependents, and during the period of service they would have to rely on uncertain charity. The twentieth century sense of social obligation would not permit such a disposition of the question.

Second, provision might be made for insuring the lives of soldiers and sailors in private insurance companies at such rates as the officials decided upon, the state, national or local, paying either all the premium or such part as should be represented by the extra hazard of war. In some cases this has been done; some cities have insured the lives of citizens called into service. But as a practical solution of the question this would have been an awkward measure. Too many millions are engaged. There are many private companies among which to adjust the distribution of business. No two local governments would agree upon the amount and terms of insurance, and thus discrimination of an invidious character would arise. The national government, where one exists, might insure the risks in private com-

¹ The writer has prepared for early publication by the Carnegie Foundation a study of *The Effect of the War on Life, Social, Marine, and Fire Insurance*.

panies, but this would not remove the above practical objections nor others which are apparent.

Third, the national government itself might undertake the granting of life insurance. This method is the one which has been adopted in the United States; and the chief merits and defects of the plan as a whole will be discussed in connection with the following analysis of the method now in operation.

The law enacted by Congress established a Bureau of Military and Naval Insurance under the Secretary of the Treasury; provided for the issuance of policies of life insurance to those in the military and naval service of the nation, in addition to the allotment of soldiers' and sailors' pay to dependents; and also contained provision for reëducation, and other features.

The bill had its origin in the condition described and resulted from the coöperation of the Treasury Department, the Committee on Labor of the Advisory Commission of the Council of National Defense, the Departments of Commerce, Navy, Labor, an advisory committee of insurance representatives, and others. The insurance representatives favored the bill except the provision for life insurance, arguing that the other provisions of the bill were sufficiently liberal, although they favored the payment of a direct compensation of \$1,000 in case of death during service or within five years after discharge from the service.

The chief provisions of the act so far as they refer to life insurance are:

First, the appropriation of \$23,000,000 which, with the premiums received on the policies, constitutes the fund from which claims are to be paid during the first year. There has been considerable disagreement as to the adequacy of this fund, due to the impossibility of predicting what the death losses will be; in any event the credit of the United States is pledged and the claims will be paid.

Second, a definition of what constitutes "marriage," "child," "wife," "divorce," and other terms about which uncertainty or disagreement might arise in connection with the payments of the insurance.

Third, the provision of a fine of \$5,000 or imprisonment for not more than two years for perjury in obtaining family allowance, compensation, or insurance.

Fourth, the granting of insurance without a medical examination to every commissioned officer and enlisted man and every member of the Army Nurse Corps (female), and Navy Nurse Corps (female) under the following conditions:

a. The insurance is granted upon application in amounts of not less than \$1,000 or more than \$10,000.

b. It is insurance against death or total permanent disability.

c. Such insurance must be applied for within 120 days after enlistment, or after entrance into or employment in the active service, and before discharge or resignation, except that those in the active service, on or after April 6, 1917, and who while in such service and before the expiration of 120 days from and after the publication of the act become disabled or die, shall be deemed "to have applied for and to have been granted such insurance."

Fifth, the proceeds of the insurance are payable in case of death or disability in instalments and not as a lump sum.

Sixth, the insurance is not assignable, nor is it subject to the claims of creditors of the insured or of the beneficiary.

Seventh, provisions are made for maturity of the policy of insurance at certain ages, as well as for cash, loans, paid-up and extended values, dividends from gains and savings and "such other provisions for the protection and advantage of the insured and beneficiaries as may be found to be reasonable and practicable." This extract from the law indicates one of its leading characteristics, namely, the large discretion which is given to its administrators, a feature which was clearly recognized by the framers of it. The whole plan is so new and the contingencies which may arise so numerous, that it seemed unwise to attempt to specify in many particulars. The principle of entrusting large responsibility and discretion to administrative officers is being followed increasingly and the results achieved seemed to warrant its application in these special circumstances.

Eighth, the premium calculations are made on the basis of the American Experience Table with an interest of $3\frac{1}{2}$ per cent.

Ninth, the United States bears all the expense of administration and of excess mortality and disability resulting from the war. The premium rates are, therefore, the net rates of the American Experience Table of Mortality, with an interest accumulation of $3\frac{1}{2}$ per cent.

Tenth, the insurance during the period of the war is term insurance for successive terms of one year. That is, it is one year, renewable, term insurance during the period of the war. This is the kind of insurance under which no reserve is accumulated, and therefore no cash surrender values. It is insurance year by year, and the cost is paid for each year. Since with increasing age the risk increases, the premium on such insurance increases each year, although in the early ages this increase is not marked. No physical examination is required upon

application, nor is any such examination required year by year. Term insurance is for all practical purposes temporary insurance, since the cost throughout life increases greatly and since few are able to pay increasing costs with increasing age. It is assumed by private companies, as well as by the buyer, when this kind of insurance is sold, that such insurance either will be dropped after a few years, or will be transferred to one of the regular life, limited payment, or endowment policies.

The law provides that not later than five years after the close of the war, this term insurance will be converted without medical examination "into such form or forms of insurance as may be prescribed by regulations, and as the insured may request," but that such "regulations shall provide for the right to convert into ordinary life, twenty-payment life, endowment maturing at age sixty-two, and into other usual forms of insurance." This extract illustrates again the wide discretion which is left to the administrators of the law.

It will be understood that the above provision of the law contemplates the maturing of these contracts of insurance by the United States government; which means, of course, that the United States will conduct for many years public insurance. Some of the contracts will not mature for over half a century. Then, too, it must be recognized that after the close of the war, there will be in the regular army and navy, men in active service and men entering service. These men will be eligible for insurance under the provisions of the law. It may well mean that the United States will conduct an active insurance organization in time of peace to serve the needs of those whose insurability is decreased, from the standpoint of the private insurance companies, because of their military service.

The relation of the law to the pension system is in this connection clear. It is intended that the various provisions of the law shall make it unnecessary to utilize any of the old types of pensions. And in view of the history of the pension system in the United States it is to be hoped that this will be the result. But if, when the thousands, or probably millions, of soldiers and sailors return, it is found that for many who have transferred their term insurance to the regular forms the burden of paying the premiums becomes heavy as old age approaches, a grateful and patriotic nation may well insist that these premiums be paid from the state treasury. Or perchance a political party seeking power may, as in the past, dilute its patriotism with practical political strategy and favor such a practice. In either case, the result would be practically the same as a pension, and would certainly have many of the evils of the old pension system.

It is to be noted especially that the cost of this insurance to the insured is very moderate—because it is term insurance and because the government pays all the administrative expense and bears the excess mortality cost. The insured does not have in his premium any charge for the agent's commission, for examination fee, rent, offices, or any of the ordinary costs of a policyholder in a regular private insurance company, except the mortality cost, and a part of this is borne by the government.

The good features of this unusual experiment in government life insurance by the United States are evident. The measure was adopted when feelings of patriotism were at a high pitch. There was a disposition to be impatient with those who opposed the measure, and perhaps weaknesses in it will develop because of the fact that it was not subjected to the normal amount of criticism. The offering up of a life in the service of the nation does not easily lend itself to the counters of the market place, and to many the most liberal treatment of the men who were entering active war service seemed but an inadequate compensation. Nevertheless, the laudable sentiments of those who were instrumental in enacting this legislation and of those critics who were silent will not do away with the purely practical problems which will arise in applying the law.

The results may ultimately be very great. If, for example, experience shows that the government can successfully insure four or five millions of its citizens who are at war, the question may well be asked why it cannot insure those many other millions who are in civil life. In other words, the act may result in bringing to the front, as a practical question, government life insurance and the prohibition of private life insurance. This example is given only as being one of the many practical questions of large import which may arise as a result of this public insurance act.

Other questions may concern themselves with the administration of the law in its political party aspects. Theoretically, the government ought to be able to conduct this public life insurance organization at an actually lower per unit cost for the overhead expenses, even if such elements as rent and interest on the investment should be allowed. The business of life insurance seems to be one subject to a considerable degree to the principle of decreasing cost and the government ought to be in position to take peculiar advantage of this principle. However, as is well known, practical considerations often interfere with the realization of theoretical possibilities. In some countries, as, for example, Australia, the private insurance organizations in competition

with state insurance seem to have been able to supply life insurance on as advantageous terms as the public organization.

However, it is in connection with the second amendment to the War Risk Insurance Bureau act, passed by Congress October 6, 1917, that the most important government assistance is granted.

This comprehensive act provides for life insurance, which has been previously described, for allotments and family allowances, and for compensation in case of death or disability. The allotment and allowance are compulsory as to wife, a divorced wife who has not remarried and to whom alimony has been decreed, and to a child; and voluntary as to any other person, with certain minor limitations. The monthly compulsory allotment has a maximum of not more than one half the pay, but not less than \$15. Any additional sum from the monthly pay may be deposited to the credit of the enlisted man, who receives interest on it from the government at the rate of 4 per cent. In addition, the government may pay, upon proper application by the enlisted man, to his family or beneficiary, a sum not to exceed \$50 per month, the particular sum depending upon the number and degree of direct relationship of the dependents or beneficiaries. In the granting of family allowances, two classes are established: Class A includes the wife and children, and Class B includes the parent, brother, sister, or grandchild. Under certain limitations, both a divorced wife and an illegitimate child are included under the provisions for the allowance. Dependency is the test to be applied in determining the right to the allowance.

Compensation is also provided "for death or disability resulting from personal injury suffered or disease contracted in the line of duty by any commissioned officer or enlisted man, or by any member of the Army Nurse Corps (female) or of the Navy Nurse Corps (female) when employed in the active service."

As is generally known, it has become the practice of many life insurance companies to incorporate in their regular policies a "disability clause," which provides that in case of the permanent and total disability of the insured no further premiums are required of him. The policy then either becomes paid up and is paid to the beneficiary on the death of the insured, or sums are paid in instalments.

Under the United States law for the insuring of those in military and naval service, compensation is paid for disability. It is on a monthly basis and varies from \$30 to \$100 per month, in case of total disability, the amount being adjusted to the number of dependents or the extent of the disability, as in the case of the loss of both feet,

hands, or eyes, when the rate of compensation is \$100 per month. If the disability is partial, "the monthly compensation shall be a percentage of the compensation that would be payable for total disability, equal to the degree of the reduction in earning capacity resulting from the disability." A schedule or ratings of reductions in earning capacity from specific injuries or combinations of injuries of a permanent nature is to be adopted and applied by the administrators of the law. In addition to this compensation, the law provides further that such reasonable medical, surgical, and hospital services shall be furnished by the United States, as well as such artificial limbs, trusses, and similar appliances, as "the director may determine to be useful and reasonably necessary."

If death results, the compensation granted varies from \$25 a month for a widow to \$47.50 a month for a widow and two children, with an additional \$5 a month for each additional child up to two. If there is no widow, but dependent children, the compensation for one child is \$20 a month, for three children \$40 a month, and \$5 per month for each additional child up to two. A compensation of \$20 a month is established for a widowed mother.

Certain other allowances are made, as, for example, \$100 for burial expenses and the return of the body to the home. The allowance to the widow or widowed mother continues until remarriage and to the children up to the age of eighteen years or marriage. The term "widow" for this purpose is defined as "one who shall have married the deceased not later than ten years after the time of injury." This limitation was imposed to guard against an evil which has been present in the pension systems of the United States.

The compensation for disability includes total temporary disability, permanent disability, and partial disability. The compensation provided depends upon the degree of disability and the number of dependents. For total disability, the allowance is \$30 a month when no wife or child is living; for a wife and three or more children \$75 per month. If, in addition, the recipient is in a helpless condition, an additional sum not to exceed \$20 per month is allowed for a nurse or an attendant; but if the disability results from the loss of both feet or both hands or both eyes or in "becoming totally blind or helpless and permanently bedridden from causes occurring in the line of duty in the service of the United States," the rate of compensation shall be \$100 per month.

An especially interesting and important feature of the disability insurance is that one which provides for a system of reëducation for

those cases "of dismemberment, and of injuries to sight or hearing." The government will provide vocational training and reëducation and will require the insured to pursue a course of training. In case of wilful failure to do so, compensation will be suspended. If such a course prevents the injured person from acquiring a substantially gainful occupation, a form of enlistment into the military or naval service may be required. This enlistment will entitle the person to full pay on the basis of the last month of his active service, and his family to family allowance and allotment in lieu of all other compensations for the time being. Just what use will be made of these partially disabled persons is uncertain; and this, like many other sections of the law, leaves the matter open for later administrative regulation or judicial interpretation.

It may appear unpatriotic and critical to characterize these provisions, together with the insurance feature which has been previously described, as "generous," since the risk or sacrifice of life for the service of the nation cannot be estimated in terms of money. Such allowances are generous only as compared with those which are and have been made by other nations or which have been made in the past by the United States.

W. F. GEPHART.

PENSIONS. Upon the declaration of war by the United States, the federal Children's Bureau immediately began the preparation of a series of studies on the welfare of children and other dependents in the warring countries. The report on the care of the disabled men, their dependents and their survivors in the United States and foreign countries forms Publication number 28 of the bureau (*Governmental Provisions in the United States and Foreign Countries for Members of the Military Forces and Their Dependents*, Washington, 1917, pp. 236). The chief of the bureau secured the aid of Capt. S. Herbert Wolfe, a well known actuary of New York City, who supervised the work of the Bureau's staff of experts.

The countries covered include the United States, Great Britain, the British colonies, Austria, France, Germany, Italy, Russia, Switzerland, and the Netherlands. A report on Canada was published in Bureau Publication number 25. A separate chapter is devoted to each country, while a brief review of the general tendencies of foreign pension legislation gives a comparative statement of the benefits provided in the various countries.

Of special value is the discussion of the pension system of the

United States. Until the publication of this study, it was impossible to find a clear statement of the scope and content of the long series of laws on this subject. The tables showing the yearly expenditures for pensions by this country are impressive as an exhibit of liberal treatment of the American soldier and his dependents.

Each chapter gives a brief history of the development of the plan in use in the various countries, followed by a detailed statement of the pay of each class of officers and enlisted men, the separation allowances, the rate of pension for disability, the pensions for survivors, maternity relief, the methods of administration, and, when possible, some information about the rights to training and reëducation of men partially disabled by service. Careful citations of sources are given for all important statements, and at the end of the chapters a list of authorities is given.

The systems in use in some of the countries, such as Germany, are extremely involved, and a great amount of study and care has been devoted to presenting the facts in a clear and authoritative form. One interesting feature of the various systems is the provision made by some of the countries for special aid in case of maternity, a benefit lacking entirely in our American system. The description of the Swiss military insurance brings out the main points of that plan, but it is a matter of regret that a more extended account was not given. The methods used by the various countries for the preservation of the economic status of the family of the soldier is the background of the study. Such an investigation was well worth while at any time, but at the present moment the study is of peculiar value, and it is especially fortunate that the bureau was able to place the data in the study at the disposal of the committee which drafted the law for the insurance of soldiers and sailors, now on our statute books.

HENRY J. HARRIS.

WIDOWS' PENSION LAWS. Under the direction of Samuel McCune Lindsay, the New York Bureau of Municipal Research has published a study of widows' pension laws, which in brief scope gives a well rounded account of the present status and recent experience under these laws (*Widows' Pension Legislation*, Municipal Research, No. 85, May, 1917, pp. 125, 50c.). The aim of the report is to show the history and purposes of widows' pension laws in New York and other states and to discuss the value of the different methods of administration. The conclusion is reached that these laws are not an endowment of motherhood nor an indemnity of widowhood nor a method of relief of distress, but that they are an effort to conserve childhood as a pub-

lic asset. The motive is to give the child a real home instead of an institutional one, a home under the guidance of the child's mother with a normal family life.

The data presented include a digest of the provisions of the laws of twenty-eight states and cities, while a useful tabular analysis enables one to make a ready comparison of their scope. For those interested in securing the enactment of new laws and for persons administering them, there is a wealth of information on such very practical points as supervision of beneficiaries, rates of pension, methods of payment, medical service, vocational guidance, control of school work, use of the courts and schools, use of private organizations in carrying out the laws, and the like.

Emphasis is placed on the fact that the scheme of mothers' pensions is as yet too new to form any definite or final conclusion as to the value of this method of conserving childhood. The danger of the plan arises from the fact that it may come to be regarded as a substitute for fundamental measures which would reduce the number of dependent children and of widows in our country.

HENRY J. HARRIS.

PENSION FUNDS IN ILLINOIS. The Chicago police pension fund has a deficiency whose present actuarial value is over \$30,000,000; the Chicago firemen's fund has a deficiency whose present value is over \$13,000,000; the Chicago teachers' fund has a similar deficiency of over \$15,000,000, while other Illinois cities have pension funds in like straits. It is of course a state of affairs which can be matched in many American cities and which will in the near future call for thorough reorganization, with perhaps serious consequences for the innocent victims of the unwise and unscientific plans on which most of our American pension funds have been established.

To make a careful survey of the existing situation, and to indicate some plan for the reform of the evil in Illinois, the state legislature in January, 1916, authorized the creation of the Pension Laws Commission, whose report was submitted in December, 1916 (*Report of the Illinois Pension Laws Commission*, Springfield, 1917, pp. 310). The scope of the report is indicated by its subtitles: Part I, Investigations with Certain Comparative Studies; Part II, Underlying Principles and Specific Recommendations for a Revised Pension Plan.

The commission restricted itself to a concise review of foreign experiences and gives a comprehensive statement of conditions in Illinois. The actuarial section of the report was prepared at the Uni-

versity of Illinois under the supervision of Professor H. L. Rietz, who had the coöperation of Professor D. L. Campbell, of the Armour Institute.

The recommendations of the report include a model plan for pension funds for civil employees and certain specific reforms for each of the four large funds of the city of Chicago. The commission also recommended that further study be made in order to devise plans to rehabilitate the funds operating on an unsound basis and to propose plans in regard to other features for which the time at their disposal was too limited. The value of the report consists in its good review of existing conditions, its clear statement of the essentials of a sound pension plan, and its specific advice as to certain evils which it is practicable to remedy at once. The volume will be helpful in creating a public sentiment which may lead to an improvement in the existing funds and prevent the recurrence of similar difficulties in funds established later.

HENRY J. HARRIS.

THE NEW BRITISH HEALTH INSURANCE BILL. Early in 1916 the British Treasury Department appointed a Departmental Committee on Approved Society Finance and Administration to make a study of the health insurance system and to report upon any amendments in the financial scheme of the insurance acts which experience of the administration of the sickness, disablement, and maternity benefits might suggest as desirable. The financial recommendations of the committee were, however, to be restricted to the limits of the existing benefits and contributions and were not to include any further grants from the national treasury. The latter restriction was modified in effect, when the Prime Minister announced on October 11, 1917, that a further grant of £250,000 annually would be recommended to Parliament, thus bringing the total amount of the grants from the national treasury in respect of money benefits to £400,000 a year in excess of the provisions from public moneys made by the original 1911 act.

The Departmental Committee made three reports, the *Interim Report* (Cd. 8251), the *Further Report* (Cd. 8396), and the *Final Report* (Cd. 8451). The announcement of the Prime Minister made it possible to make more liberal provision than the recommendations of the committee included; and the bills introduced, one on November 6 and one on December 6, 1917, are based on the agreement to add £250,000 to the treasury grant. The bill as passed by the House of Commons on December 19 (Bill number 119) seems to have a good chance of early enactment; fortunately it is accompanied by an Explanatory

Memorandum (Cd. 8816) which assists the non-British reader to comprehend the very complicated and elaborate British system. The new bill adds to the already bewildering financial arrangements three new "funds"; the Women's Equalisation Fund, the Contingencies Fund and the Central Fund. The fact that the sickness rate of the insured women, especially the married women on account of pregnancy, was so much in excess of the original estimates has been a source of financial difficulty to societies having an appreciable number of women members since the inauguration of the system. This deficit is to be met in part by reducing the sum of one and one half pence paid into the reserve from the weekly dues, by one third of one pence, which, it is estimated, will be more than sufficient to meet the deficit due to the generally higher sickness rate of women; the deficit caused by the sickness claims on account of pregnancy will be met from the Women's Equalisation Fund, into which the government will pay about £250,000 annually. This fund will be apportioned each year among the societies having women members on a plan to be worked out by the Joint Committee and approved by the Treasury.

The second, or Contingencies Fund, is to be formed by taking from the sinking fund contributions four ninths pence for men and one third pence for women and to credit at least seven eighths of these amounts to the societies to form a contingencies protective fund to safeguard the members from a reduction of benefits or increase of contributions in case an actuarial valuation shows it to have a deficiency. This fund will receive about seven eighths of the amounts just referred to; the other one eighth or less will be transferred to the Central or Special Risks Fund under the control of the National Health Insurance Joint Committee. The latter will make grants from this fund to societies having deficits caused by excess of sickness due to extra risks of occupation, unhealthy environment or other causes over which the society had no control. This fund will also receive a government grant of £150,000 annually.

There are a large number of other provisions (the bill covers 46 folio pages) most of which relate to details of administration. The provision which has received most attention is that in clause 22, creating a new benefit, the "marriage benefit" of two pounds, which any insured woman is to receive at her option when she marries. The woman who accepts this and relinquishes employment, ceases to be insured for sickness, disablement, and maternity benefits, but is entitled to medical and sanatorium benefit to the end of the calendar year next following; if a woman does not apply for the marriage benefit and also

leaves employment, she is entitled to all benefits for one year after employment ceases. If she accepts the marriage benefit and remains in employment, she is to be treated for benefit purposes as having entered insurance for the first time at the date of her marriage.

The new burdens assumed by the national treasury consist first of the £250,000 a year to cover the cost of sickness due to women and second the £150,000 a year due to occupational risks and similar causes. These two features are in effect an extension of the original plan of insurance; the actuaries who made up the estimates on which the system was based, did not make any allowance for sickness due to pregnancy—it is even stated that the authorities forgot about it. The most important change is, of course, the reduction of the amounts assigned to the sinking fund. This will postpone the date at which larger benefits can be granted by a period of from fifteen to twenty years.

H. J. H.

The *First Annual Report of the United States Employees' Compensation Commission*, 1916-1917 (Washington, pp. 49) contains the text as well as a summary of the compensation act. Several pages are given to the interpretation, and statistics are tabulated.

Under workmen's compensation are also to be noted: *Third Annual Report of the Industrial Commission of Wisconsin* (Madison, Sept. 1, 1917, pp. 23); *Workmen's Compensation Act with 1917 Amendments*, also published by the Wisconsin commission (pp. 58); *Workmen's Compensation Law of Iowa Revised to July 1, 1917* (Des Moines, pp. 45); *Iowa Workman's Compensation: Legal Opinions*, by Henry E. Sampson (A. B. Funk, Iowa Industrial Commissioner, Des Moines, pp. 69); *Kansas Workmen's Compensation Laws* (Topeka, Secretary of State, 1917, pp. 23); *Workmen's Compensation Act of Connecticut* (Hartford, June, 1917, pp. 50); and *Third Annual Report of the Board of Compensation Commissioners of Connecticut* for 1916 (pp. 20).

A reprint has appeared of the address on *Progress Toward Health Insurance*, by John B. Andrews, delivered at the National Conference of Social Insurance at Pittsburgh (pp. 8).

The *American Labor Legislation Review* for December, 1917, presents a concise positive statement in answer to opponents of universal workmen's health insurance, together with a select bibliography of publications by both sides during the preceding year and a half. The issue gives prominence to standards proposed by the New Jersey commission, the third state body to report in favor, which advocates health

insurance as an essential measure of labor reconstruction both during and after the war.

The workmen's compensation law of each of the following states, with 1917 amendments, has been published in twenty-five-cent pamphlets by Frederick R. Jones, of New York: California, Colorado, Connecticut, Illinois, Iowa, Massachusetts, Michigan, Minnesota, Nebraska, Nevada, New Hampshire, New York, Ohio, Oregon, Pennsylvania, Rhode Island, Vermont, and Wisconsin. (Workmen's Compensation Publicity Bureau, 80 Maiden Lane, N. Y.)

The Insurance Society of New York has printed an address on *Ascertainment of Machinery Values and Losses*, by John Hankin (pp. 46).